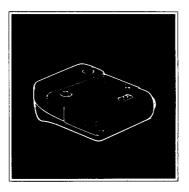
Still Video Camera



Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

To record and play back with this unit, the MAP-T2 playback controller is necessary. The MAP-T1 playback adaptor cannot be used with this unit.





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MPORTANT SAFETY NSTRUCTIONS

precautions should always be followed, including When using your electronic flash, basic safety

- Read and understand all instructions before Close supervision is necessary when any
 - Do not leave appliance unattended while appliance is used by or near children. in use

Care must be taken as burns can occur from touching hot parts.

dropped or damaged -- until it has been Do not operate appliance if it has been examined by a qualified serviceman.

Position the cord so that it will not be tripped over, pulled, or contact hot parts.

pull plug from outlet. Grasp plug and pull to Always unplug appliance from electrical outlet when not in use. Never yank cord to disconnect

To reduce the risk of electric shock, do not Loop cord foosely around appliance when immerse this appliance in water or other To reduce the risk of electric shock, do not disassemble this appliance, but take it to a

qualified serviceman when service or repair Incorrect reassembly can cause electric shock when the appliance is used work is required.

cause a risk of fire, electric shock, or injury The use of an accessory attachment not recommended by the manufacturer may subsequently. ō

Owner's Record

The model and serial numbers are located on the bottom of Refer to these numbers whenever you call upon your Sony Record the serial number in the space provided below. dealer regarding this product.

Model No. MVC-A10 Serial No.

Check your unit first

Table of Contents

not expose the unit to rain or moisture. To prevent fire or shock hazard, do

To avoid electrical shock, do not open the cabinet. Refer servicing to qualiled personnel only.





sufficient magnitude to constitute a This symbol is intended to alert the "dangerous voltage" within the product's enclosure that may be of isk of electric shock persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

INFORMATION

Classif B comploid proces, a succious with the specific cancions in Subpart J or Part 1 to FPC Clause, which are expected to provide executable profile constraint such interference in a resolution for missilizon. However, these in the constraints of the process of the profile constraints and authority the executation of the process in reference to authority the executation of the process in reference to authority the executation of the process in reference to authority the executation of the process in reference and authority the executation of the process in the determined by the process the interference of the process of the p equipment generates and uses radio frequency energy if not installed and used property, that is, in strict accordance with the manufacturier's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for

the receiving antenna

Relocate the equipment with respect to the receiver Move the equipment away from the receiver that the equipment into a different outlet so that equipment and receiver are on different branch circuits. If necessary, the user should consult the dealer or an experienced radiotelewisins technician for additional suggestions. The user may find the following boodled propagated by the Federal Communications Commission

"How to Identify and Resolve Radio-TV Interference Problems." This booksis is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No 064-000-00345-4.

There are the following differences, depending upon USA and other countries: Neither playback controller nor external microphone is packed with the unit. Canada: The MAP-T2 playback controller and an external microphone are packed with the unit. the country where MVC-A10 is purchased. To Record onto a Recorded Track Shooting in Backlit Situations -ocation and Function of Parts Shooting with Self-timer Check Your Unit First Inserting the Mavipak Macro Shooting **Quick Reference** roubleshooting Power Source Specifications Precautions Outline

Outline

The MVC-A10 "Mavica" is a still video camera that records pictures and sounds magnetically without the use

Automatic adjustments

Pictures and sounds can be recorded automatically

Searching for unrecorded tracks by the blank search function. Backlight compensation

> It is compact and light in weight. It is easy to operate because focus and exposure adjustments are not necessary.

Audio recording

recording is automatically done for approximately 10 seconds following a video recording. This is convenient for recording a comment on the video microphone or an external microphone. Audio Sound can be recorded through the built-in ecording, etc.

Display window

The number of the recorded tracks and the various ndicators appear on the display

The subject can be shot as close as approximately 50 cm (20 in.) from the lens surface.

Close-ups (MACRO) tracks per second.

You can shoot in sequence onto 4 tracks or on 10 You can shoot a too dark subject against a bright

Sequential shooting

background.

Precautions

• The Mavica MVC-A10 is a still video camera based on the MED 31 format. To play back the Mavicak recorded with the MVC-A10, a play-back controller, MAP-12, or a sail video player with the MED 19) mark is necessary. When an unit without the MED 31) mark is used, proper

Avoid using in a strong electric field. playback is not possible

Pictures may be distorted or otherwise spoiled when used mear the antenue of the Yor andio stated.

If the ferre gate offin, wipe off the lens with a dry, soft cioth. When it is left dirty, it can result in poor pictures. When it as outermenty dirty, use a mild soap on the cioth before wiping.

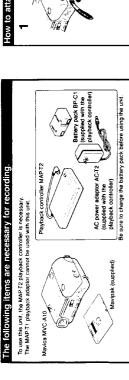
 Do not leave the unit in a focation near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.

• When the casing becomes soiled, clean it with a soft cloth

dampened with mild detergent solution. Never use abrasive cleaners or chemical solvents, as they may harm If you have any question or problem concerning your unit that is not covered in this manual, please consuit the the casing.

Be sure to bring the camera and the playback controller to the Sony dealer when requesting repair.

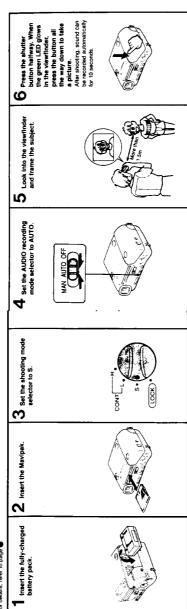
Quick Reference



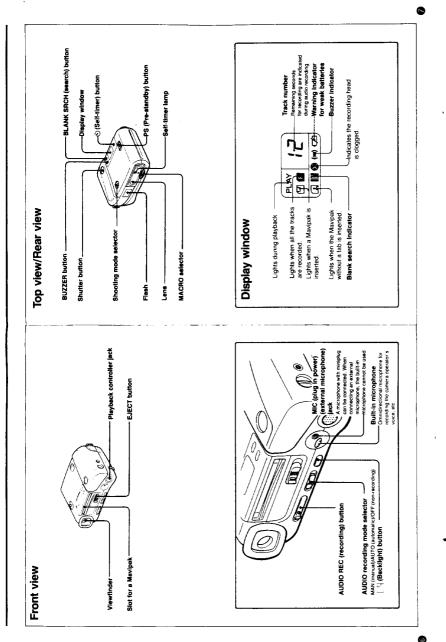


Recording

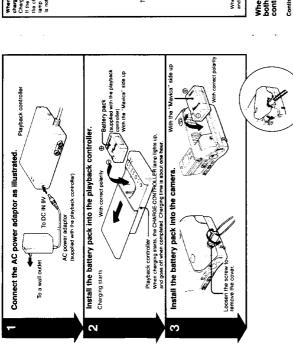
For details, refer to page



Location and Function of Parts



Before operating the unit, be sure to charge the battery pack fully with the playback controller.



When the battery gets weak, 4/1 appears on the display Number of tracks that can be recorded with one (blinking) The battery pack is starting to tose power.
Replace or charge the battery pack as soon as possible.

(id) The battery pack has consumed all of its power by No recording can be done. Replace or charge the battery pack

About 125 pairs of picture and sound can be recorded when the battery is charged for one hour (according to the

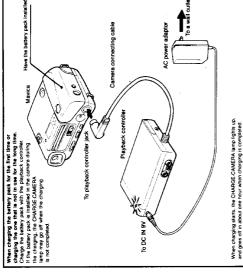
test specified by Sony)

Audio/Video recordings Video recording only

specified by Sony)

About 500 pictures (10 Mavipaks) can be recorded when the battery is charged for one hour (according to the test

To charge the battery pack in the camera



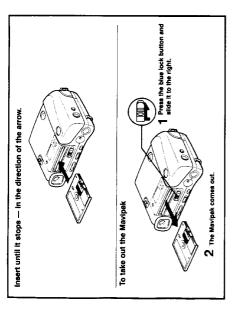
When the battery pack is installed in both the camera and the playback controller

When the camera is not in use for a long time, remove the battery pack. If the battery is nistalled, even if the shooting mode selector is set to LOCK, a negligble amount of electric current flows. Life of the battery pack
Replace the battery pack with a new one (8P-C1, optional)
you can only take about hit the number of pictures,
under average temperatures, even when it is fully charged. Continuous charging can be carried out — from camera to playback controller.

Precautions on the battery pack

 When charging the battery pack: always use the MAP-T2 plespack connotine.
 Lo not short line terminals of the playback controller or the battery pack by streewforters, buts. etc.
 Lo not technique a fully charged battery pack or the battery may be impaired

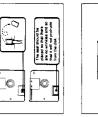
Inserting the Mavipak

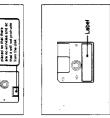


To prevent accidental erasure

•

 When the hole from which the tab was taken is covered by a seal supplied with the Mavipak, it can be recorded again. Take off the tab on the back of the Mavipak.







Place the tabel at the position indicated on the picture at right. When the tabel is not placed at the position shown, it can cause malfunction and damage.

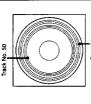
To make a memorandum of recorded contents

- Never open the protective shutter
 Do not place the Merchatk where there is magnetism (ontop of a speaker for, etc.). This can cause the Maxipak
 to be aread or to be of poor quality.
 Do not leave the Maripak in the camera for a long period
 of time when not in use.
 Do not leave the Maripak where dense is direct similight.
 Do not leave the Maripak where dense is direct similght.
 when changing the Maripak, avoid doing it in rain or
 show, or in dusty places. When water or dust gets inside
 show, or in dusty places. When water or dust gets inside
- in the camera, it causes damage.

Protective shutter-

Mavipak

substitution of the properties The Mavipak is a 2-inch video floppydisk. It conforms to the unified



sounds recorded on the Mavipak? How are pictures and

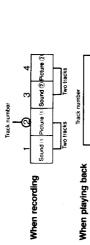
Video recording

A video recording requires one track for each picture. When recording pictures only, a Mavipak can hold 50 pictures.

A pair of picture and sound can be recorded. (Sound by itself cannot be recorded.) As an Audio recording

by two) The sound played back may not cor-respond exactly to its paired picture because the audio recording starts after the shutten is pressed. audio recording requires one track, a recording of the pair of picture and sound requires two tracks. (Track number on the display advances

When playing back the Mavipak on which sound is recorded En the case of a Mavipak on which sound is recorded with the AUDIO recording mode selector set to AUTO.



Even if only pictures are recorded, sound can be recorded afterward as narration for the recorded pictures. For details, refer to the operating instructions for the MAP-T2 (page ①).

Sound (2)

Sound (i) Picture 7

Select the shooting mode.

Select the AUDIO recording mode. 7

When the selector is set to AUTO

MAN AUTO OFF

AUTO (automatic recording):
Sound is automatically recorded for about 10
seconds immediately after shooting.

When the selector is set to MAN



Sound can be recorded for about 10 seconds when you would like to do so, within 5 minutes after shooting. MAN (manual recording):

When not recording sound Set the selector to OFF.

Sound playback for continuous shooting

The sound is played back, corresponding to the first picture.

Do not slide the AUDIO recording mode selector during shooting. Otherwise, recording cannot be completed.

To shoot a single picture

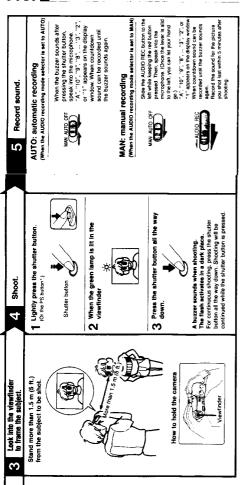
S: A single picture is shot each time the shutter button is pressed.

4 pictures per second are shot while the shutter button is pressed. Useful in active sports. To shoot continuous pictures CONT L (continuous low):

10 pictures per second are shot while the shutter button is pressed. Useful for studying the swing in tennis, golf, etc. by stopping the picture. CONT H (continuous high):

When using flash in the CONT L and H modes, continuous shooting of one picture per approximately 2 seconds can be done (when using a fully-charged battery pack).

CAUTION



the display window will go off.

To turn the buzzer on, press the button again. (w) on the To turn the buzzer off, press the BUZZER button. (**) on

To prevent battery consumption, the indicator on the display window goes off, and the power will go off automatically. To start recording again, press the shutter

button lightly.

When no recording is made for 5 minutes

display window will appear.
The evi influence will appear and the buzzer will go on when the shooting mode selector is set to the LOCK or after changing the battery pack.

PS button

When audio recording starts and ends (sounds once each

The buzzer sounds in the following cases:

When shooting (beeps once)

time)

- When it impossible to record a picture or a sound
(deeps continuously)

- Self-limer shooting (sounds for 10 seconds)

The flash light reaches up to about 4 m (12 ft.). Shoot so that the subject is within 1.5 m (5.ft.) to 4 m (12 ft.) When not using the camera

Press the PS button. The sound recorded before pressing To interrupt an audio recording

Set the shooting mode selector to the LOCK position The power turns off and the shutter button is locked.

the button remains on the track(s).

When the PS button is pressed, it is the same as pressing the shitter button lightly, which starts measuring the lighting condition and charges the flash. By using these button, the cames as in issned by position, and will respond to the shutter. However, when the PS button is pressed, it

consumes the battery quickly.

Track number on the display window advances by 2 because a recording of the pair of picture and sound Display window in recording sound require 2 tracks

When a red lamp blinks in the viewfinder, and the buzzer sounds No recording can be made. Look at the display Cause and remedy window to find the cause. Indicator

The Mavipak is not inserted. Insert The tab on the Mavipak has been











1 Set the AUDIO recording mode selector to MAN.
2 Stide the AUDIO REC button to the left, within 5 To erase the sound just recorded

minutes after the sound is recorded as after the sound is recorded in a Side the AUDIO REC button to the left again while "A", "0", "0", "1" appears on the display window. The accord just recorded is essed. The sound carnot be erased when more than 5 minutes

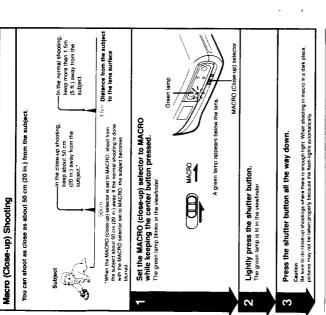
To record a new sound over the sound just

have passed after it was recorded.)

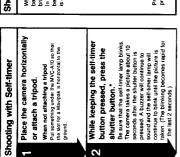
1 Set the AUDIO recording mode selector to MAN.
2 Slide the AUDIO REC button to the left and record a new sound within 5 minutes after the first sound was

recorded. The previous sound recorded is erased and (The sound cannot be erased when more than 5 minutes the new sound is recorded.

have passed after it was recorded.)



Use the self-timer when taking a group picture, etc



becomes dark because the background is too In this case, press the backlight button before shooting. The exposure for the subject Shooting in Backlit Situations When shooting in the backlight, the subject Press the backlight button each time you press the shutter button. is compensated to the proper degree.

The track number blinks

To use the backlight button in shooting

The exposure is compensated for all the tracks while released or completely released, the backlight adjustment does not operate. To continue shooting, press the backlight button again before pressing the nuous shooting). Once the shutter button is halfway the shutter button is continuously pressed (contishutter button.

Use the tripod with a platform that can not collapse because of the weight of the Mavica. For details, refer to the compact tripod, be sure that it does operating instructions of the tripod. illustration. When attaching a light, Attach a tripod as shown in the be made vertical to the ground. How to attach a tripod

Set the shooting mode selector to the LOCK position. To release the self-timer

Set the AUDIO recording mode selector to MAN. You can record sound any time within 5 minutes after the self-timer To record sound in the self-timer shooting

·Lightly press the shutter button, and after the green lamp is lit in the viewfinder, press the button all the way down.

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To use an external microphone

The edge of picture may be clipped when playing back, depending upon the TV set. To avoid this, leave some space around the subject in the close-up shooting.

CAUTION

To Record onto a Recorded Track

To record onto erased track(s)

You can record from track No. 1, the same as a new

1 Take the Mavipak out of the camera.

Press the BLANK SRCH button again. III will disappear from the display window. The blank search mode will also be released when the Mavipak is taken out, or when the battery pack is exchanged. To release the blank search mode

A track is blank in the following cases

- whhen the recorded picture or sound is ersead with a playback controller.
 when no sound is recorded within 5 minutes then no sound is recorded within 5 minutes after the placeture is show with the AUDIO recording mode selector set to MAN.
 when the AUDIO recording mode selector is set to GFF while such counding.
 when the AUDIO recording mode selector is set to GFF while such counding.
 when the AUDIO recording mode selector is set to GFF while such counding.

When the blank search function is used or not

Ex: In the case of a Mavipak on which recordings from No. 1 to No. 5 were made, and tracks No. 2 and No. 4 were erased.

Without using the blank search function

A total of 47 tracks can be recorded. For No. 2, No. 4 and from No. 6 to No. 50. Continuous shooting for 2 to 4 to 6 to 50 can be done.

Using the blank search function

A total of 45 tracks can be recorded from No. 6 to No. 50.

Blank search function













A pair of picture and sound, or only a picture can be accorded A pair of picture and sound can be recorded as long as there are 2 erased (blank) tracks, even if they are not adjacent to each other (ex. No. 2 and No. 4).

Audio recording when using the blank search function











Cannot record on No. 2 and No. 4.











left while recording pictures and sounds with the AUDIO recording mode selector to MAN.

Since the Mavica records pictures and sounds magnetically, it can erase unnecessary track(s) and can record again.

Erase unnecessary track(s)

The MAP-12 playback controller is needed for erasing. For details, refer to the operating instructions of the playback controller.

A Mavipak on which all the tracks are erased from the Mavipak.

A Mavipak on which track(s) in-between are erased

2 Press the BLANK SRCH button. (i) will appear on the display window.

Insert the Mavipak and shoot.

tracks, and start recording from the track with the The camera searches for erased (unrecorded) smallest number.

The blank search mode cannot be set while the Mavipak is in the camera.

Specifications

Recording aspectly, 25 stall pectures with sounds field Audio recording. Audio recording. 6 seconds max 25 recording. Audionate cercording. 6 seconds max 25 recording. Audionate recording. Audionate recording. Audionate cercording. Audionate recording. Audionate recording. Final integer sensor. Final integer sensor. Exposure control: Programmed subresposure. Final integer sensor. Shouter: Professional person (280 000 profession growth of person (280 000 profession growth of person (280 000 profession growth of person growth of per	Jung capacity: recording: recordi	Jung capacity: recording: recording: recording mode: ing mode: ing mode: fire femorals	Recording:	formal Unified standard based on Still Video
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Design and specifications subject to change without notice.

Troubleshooting

Before going through the check kst below, first refer back to the connections and operating procedures. Should any problem persal after you'kave made these checks, comeanly you nearest Sony service facility. The number in black is the page number to refer to.

Symptom		Cause	Remedy
Will not shoot when shutter button is pressed.	No indicator in the viewfinder.	The battery is not installed. The battery is consumed.	Insert a fully-charged battery pack. See page
		The shooting mode selector is set to the LOCK position.	Set to S, CONT L or H. See page .
	A red lamp lights up in the viewlinder and the buzzer sounds.	Refer to "When the red lamp blinks in the viewfinder and the buzzer sounds" on page .	links in the viewfinder and the
The Mavipak is ejected when inserted into the camera.	serted into the camera.	The Mavipak is not inserted correctly.	Insert the Mavipak again. If it is ejected again, replace the Mavipak with a new one.
Takes time for the green famp to light up in the viewfinder.	light up in the	The battery pack has been consumed.	Put in a fully-charged battery

Symptom	Cause	Remedy
The picture is blurred.	The subject is too close.	Be more than 1.5m (5 ft.) away from the subject.
	Hands are shaking.	Hold the camera still when shooting.
	The MACRO selector is set to MACRO.	Set the s when no
The picture is reddish or greenish.	When the picture is not taken with flash, it becomes reddish under an incandescent light, and greenish under a fluorescent light.	rith flash, it becomes reddish ad greenish under a fluorescer
Many reddish circles appear on the playback picture.	Flare occurs on the lens caused by strong light like the sun.	Shoot the picture so that strong light will not go into the lens. Ex: The reflection of water caused by the sunlight.
Thick black lines appear when shooting a subject with a strong confrast. Or, the picture has a zigzag border	This occurs because of the characteristic of the image sensor	racteristic of the image sensor
The picture is dark even when the flash is used.	The subject is too far.	Shoot the picture so that the subject is within 1.5m (5 ft.) to 4m (12 ft.)
8	This occurs when the flash light goes into a person's eyes and lights the blood vessels of the retina.	This can be lessened by having the person get used to the light, or by having the person look somewhere other than directly into the camera lens.
The picture is whitish.	The backlight button was pressed in shooting, while the light came from the front of the subject.	Shool without pressing the backlight button.

Playing back sound		
Symptom		Remedy
No sound is heard.	AUDIO recording mode selector was set to OFF in recording.	Set the AUDIO recording mode selector to AUTO or MAN when recording.
	AUDIO REC button was slid to the left several times white recording with the AUDIO recording mode selector set to MAN.	3
	AUDIO recording mode selector is set to OFF in playing back.	Play back the sound with the AUDIO recording mode selector set to AUTO or MAN.
Sound is weak.	Sound was too far away from the microphone in recording.	Speak into the microphone or use an external microphone.

Symptom		Cause	Remady
The indicators on the display window disappear, and the	In recording	No recording was done for more than 5 min.	Lightly press the shutter button. See page .
power turns off.	In playing back	The same track was played back for more than 5 min.	Press the shutter button or the PLAY button of the play- back controller.
The camera does not operate.		Internal circuit is troubled by static electricity, etc.	Take the battery pack out, and re-install it to reset the camera.
Consumption of the battery pack is rapid.		Incomplete battery charge.	Install a fully-charged battery pack.
		The battery pack becomes weak.	Replace with a new battery pack.
		it is used in a place with an extremely low temperature.	The power of the battery pack becomes weak in a place with an extremely low tempera-ture. Use it after warming the camers, for example, putting it into your pocket.